

## CLAIM AMENDMENTS

Claim 1 (Amended) A vibration isolator, comprising:

a housing that has an outer non-circular seat;

a support plate that has a non-circular shoulder that seats within said non-circular seat of said housing and can move in [[both]] an axial direction, said support plate moves in a [[and]] rotational direction relative to said housing when unseated from said housing and does not rotate when seated in said housing; and,

a pendulum assembly coupled to said support plate.

Claim 2 (Original) The vibration isolator of claim 1, wherein said outer non-circular seat has a tapered surface.

Claim 3 (Original) The vibration isolator of claim 1, wherein said pendulum assembly includes a cable that is coupled to a piston and said support plate, said piston being coupled to said housing.

Claim 4 (Original) The vibration isolator of claim 3, wherein said housing has an inner non-circular seat and said piston has a non-circular outer top surface.

Claim 5 (Original) The vibration isolator of claim 3, wherein said housing includes an inner cylinder which defines a first inner chamber and is located within a second inner chamber, said piston being located within said first inner chamber.

Claim 6 (Original) The vibration isolator of claim 5, wherein said inner cylinder includes a damping element.

Claim 7 (Original) The vibration isolator of claim 3, wherein said piston has an inner cavity that contains a damping fluid.

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Claim 8 (Amended) A vibration isolator, comprising:

a housing that has an inner non-circular seat;

a support plate that can move in [both] an axial direction, said support plate moves in a  
[[and]] rotational direction relative to said housing when unseated from said housing and does  
not rotate when seated in said housing;

a piston that has a non-circular outer surface; and,

a cable coupled to said piston and said support plate.

Claim 9 (Original) The vibration isolator of claim 8, wherein said inner non-circular seat includes a tapered surface.

Claim 10 (Original) The vibration isolator of claim 8, wherein said housing has an outer non-circular seat and said support plate has a non-circular shoulder.

Claim 11 (Original) The vibration isolator of claim 8, wherein said housing includes an inner cylinder which defines a first inner chamber and is located within a second inner chamber, said piston being located within said first inner chamber.

Claim 12 (Original) The vibration isolator of claim 11, wherein said inner cylinder includes a damping element.

Claim 13 (Original) The vibration isolator of claim 8, wherein said piston has an inner cavity that contains a damping fluid.

Claim 14 (Amended) A vibration isolator, comprising:

a housing that has outer alignment means;

a support plate that can move in an axial direction, said support plate has means for seating said support plate aligning with said outer alignment means of said housing so that and

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~~can move in an axial direction~~, said support plate moves in a rotational direction relative to said housing when unseated from said housing and does not rotate when seated in said housing; and, a pendulum assembly coupled to said support plate.

Claim 15 (Original) The vibration isolator of claim 14, wherein said pendulum assembly includes a cable that is coupled to a piston and said support plate, said piston being coupled to said housing.

Claim 16 (Original) The vibration isolator of claim 15, wherein said housing has inner alignment means and said piston has means for aligning with said housing.

Claim 17 (Original) The vibration isolator of claim 15, wherein said housing includes an inner cylinder which defines a first inner chamber and is located within a second inner chamber, said piston being located within said first inner chamber.

Claim 18 (Original) The vibration isolator of claim 17, wherein said inner cylinder includes a damping element

Claim 19 (Original) The vibration isolator of claim 15, wherein said piston has an inner cavity that contains a damping fluid.

Claim 20 (Amended) A vibration isolator, comprising:  
a housing that has inner alignment means;  
a support plate that can move in both an axial and rotational direction relative to said housing;

a piston that can move in an axial direction, said piston has alignment means for seating said piston aligning with said inner alignment means of said housing so that said piston moves in a rotational direction when unseated from said housing and does not rotate when seated in said housing; and,

a cable coupled to said piston and said support plate.

Claim 21 (Original) The vibration isolator of claim 20, wherein said housing has outer alignment means and said support plate has means for aligning with said housing.

Claim 22 (Original) The vibration isolator of claim 20, wherein said housing includes an inner cylinder which defines a first inner chamber and is located within a second inner chamber, said piston being located within said first inner chamber.

Claim 23 (Original) The vibration isolator of claim 22, wherein said inner cylinder includes a damping element.

Claim 24 (Original) The vibration isolator of claim 20, wherein said piston has an inner cavity that contains a damping fluid.

Claim 25 (Amended) A method for aligning a support plate of a pneumatic vibration isolator, comprising:

releasing a fluid from a housing of a vibration isolator such that a support plate becomes seated within a non-circular seat of the housing and cannot rotate, the support plate being coupled to a pendulum assembly, the support plate being capable of movement in both an axial, and rotational direction when unseated from said housing.

Claim 26 (Original) The method of claims 25, further comprising attaching a payload to the support plate.

Claim 27 (Canceled)

Claim 28 (Canceled)